Quality Control

Work Orde		08713	20-3	*108	8713*							Page 1	
Item ID: Revision ID: Item Name:	D3220-3 Doubler	81	3	Accept	*N900	<b>040</b>	100	)*	Setup :	Start Stop	*N:	S1* S2*	
Start Date: Required Date: Reference:	10/29/13	Start Qty: 8.00 Req'd Qty: 8.00	*8* *8*		Cust Item I Customer:	D:					, i W		
Approvals:	Process P	Plan: MLJ				ate:				Start Stop		R1* R2*	
Sequence ID/ Work Center II	<b>D</b>	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reje Qty		leject lumber	Insp. Stamp	
Draw Nbr	R	evision Nbr											
D3220	В												
*100		FLOW WATER JET		0.00				9	5			Jm13-1	7-3
Waterjet		Memo		0.00									_
FLOW CNC Waterj		1-Cut as pe Dwg Rev:_ Prog Rev:_											
e.		2-Deburr if	f necessary										
110		QC2- Inspect parts off	machine FAI/FAIB	0.00									
*11 <b>0</b> *		Memo	·	0.00				9	٥			Jm 13-17	2-3

											DQA:	Date:	
NCR:	Yes	/ No				WORK ORDER NON-C	10:	VFOR	MANCE / UPDATE		QA Closed:	Date:	,
						•					QA Closea:	Date:	
Work Ord	er:					DISPOSITION			AG	AINST DE	PARTMENT	/PROCESS	
Part No.			Rework Scrap Use-as-is		1	Skid-tube Crosstube Small Fab Thermoforming Finishing		Water Je Prod. Eng. Cool Rec/Store/Packagin		Engineering Quality Other			
NCR No.			Work Order Update			~ <del></del>	posite	inec/stor	Supplier				
Root					Descri	ption of work order update	1	nitial	Action		Sign &		
Cause		Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling							1						
Operator													
Material													
Setup													
Other													
Process			İ										
Supplier		i											
Training			1									-	
Unapproved			<u> </u>										
		•				F	AUL	T CATE	GORY				
Land	ing (	Gear				General		-					-
		Bending				Bend		Grain			Ovalized	<u>L</u>	Pressure/Forced
		Centre Not Concentric to O/S		o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure	
		Cracks				Broken/Damaged		Inspect	ion Incomplete	ļ	Part Incorred	ct	Weld
		Crushed/	Crushed/Crimped		<u>L</u>	Burrs	L	Instruct	ions Incomplete/Unclear	· L	Part Lost/Mi	ssing	Wrong Stock Pulled
		Cuffs	· · · · ·			Contamination		Mainte	enance		Part Moved		
		Heat Trea				Countersink		Mislabeled		Positioned V	Vrong		

Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Inspection Strip in Tube

Torque Waves in Extrusion

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 2

October-29-13 9:51:52 AM

Item ID:

D3220-3

Accept

\*N900040100\*

Setup Start

**Revision ID:** 

Item Name: Doubler

Required Date: 10/29/13

10/29/13

Start Qty: 8.00 Req'd Qty: 8.00

\*8\*

Date:

Cust Item ID:

**Customer:** 

Reference:

**Start Date:** 

**Approvals:** 

Process Plan:

Date:

Tooling:

Date:

Stop

Sequence ID/ **Work Center ID** 

Description

QC:

Set Up/ **Run Hours** 

SPC (Y/N):

**Tool ID** 

Tool # Plan Code Qty

Accept

Run

Reject Number Stamp

Insp.

120

\*120\*

QC

Quality Control

Operation

QC8- Inspect parts - second check

Memo

Date:

Reject **Qty** 

130

Chemical Conversion Coat per QSI005 4.1

0.00

\*130\*

HandFinish Hand Finishing

Memo

Memo

0.00

16 B12.4

140

Quality Control

QC7-Inspect Chemical Conversion Coat

0.00

0.00

DAS

27

identify: ST: 180a

DAS 28 13-12-4 9-89

NCR: Yes / No						WORK ORDER NON-CONFORMANCE / UPDATE  QA Closed: Date:								
Work Ord	er:					DISPOSITION	AGAINST DEPARTMENT/PROCESS							
Part No			Rework Scrap Use-as-is Work Order Update		1	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	4	Water Jet od. Eng. Coor. re/Packaging Supplier	Engineering Quality Other				
Root					Descri	ption of work order update		Initial	Ac	tion	Sign &			
Cause		Date	Step	Qty	(	or Non-conformance	Ct	nief Eng	Desc	ription	Date	Verification	QC Inspector	
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved														
land	ina (	Geor		<del></del>		F General	AUI	LT CATE	GURY			<u> </u>		
1 <b></b>		General   Grain   BOM/Route   Hardware			Ovalized Over/Unde	tolerance	Pressure/Forced Temperature/Cure							

Inspection Incomplete

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Instructions Incomplete/Unclear

Broken/Damaged

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Burrs

DOA:

Part Incorrect

Part Moved

Part Lost/Missing

Positioned Wrong

Power Loss/Surge

Date:

Weld

Other

Wrong Stock Pulled

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cracks

Cuffs

Heat Treat

Crushed/Crimped

Inspection Strip in Tube

Torque Waves in Extrusion

Page 3

October-29-13 9:51:52 AM

Item ID:

D3220-3

Accept

\*N900040100\*

Setup Start

**Revision ID:** 

Start Date:

Doubler Item Name:

Required Date: 10/29/13

10/29/13

Start Qty: 8.00

Req'd Qty: 8.00

Date:

**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Process Plan: \_\_\_\_\_ Date: \_\_\_\_

**Tooling:** 

SPC (Y/N):

Date:

Date:

Run

Stop

Reject

Sequence ID/ **Work Center ID** 

Operation **Description**  Set Up/ **Run Hours**  Tool ID

Tool # Plan Accept Code Qty

Reject Qty

Insp. Number Stamp

150

\*150\*

Packaging Packaging

Identify as per dwg & Stock Location:

0.00

160

QC21- Final Inspection - Work Order Release

0.00

\*160\*

QC

Memo

Memo

0.00

Quality Control

										DQA:	Date:	
NCR: Y	'es	/ No				WORK ORDER NON-C	CONFOR	MANCE / UP		QA Closed:	Date:	,
Work Orde	Work Order:					DISPOSITION AGAINST			AGAINST DE	PARTMENT		
Part No.  NCR No.						Rework Scrap Use-as-is Work Order Update	Ther	Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root					Descri	ption of work order update	Initial	Ac	tion	Sign &		
Cause		Date	Step	Qty		or Non-conformance	Chief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator				,								
Material			ł									
Setup												
Other			ļ				1					

## **FAULT CATEGORY Landing Gear** General Bend Ovalized Pressure/Forced Bending Grain BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Broken/Damaged Weld Inspection Incomplete Cracks Part Incorrect Crushed/Crimped Instructions Incomplete/Unclear Part Lost/Missing Wrong Stock Pulled Burrs Cuffs Contamination Maintenance Part Moved Positioned Wrong Heat Treat Countersink Mislabeled Power Loss/Surge Other Inspection Strip in Tube Cut Too Short Misread Drill Holes Ripples in Bend Offset Out of Calibration Torque Waves in Extrusion Drawing Turning Sequence Finish Out of Sequence Folio Wave/Twist in Tube Outside Dimensions

Process
Supplier
Training
Unapproved

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Page 1

Work Order ID:

108713

Parent Item:

D3220-3

Parent Item Name:

Doubler

**Start Date:** 10/29/13

Required Date: 10/29/13

Start Qty: 8.00

Required Qty: 8.00

Comments:

IPP Rev: A New Issue 05-11-06 JLM

IPP: B 06.11.15 waterjet

EC

IPP C: 08.11.26 Comment added to step 2 KJ Verified by: eC

	11 1 C. 00.11.20	Somment added to	0 3tcp 2 1	xi vermed by	7. CC								
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.050 2024-T3 .050 sheet		Purchased	No			100	sf	118.3487	0.5937	4.999579	<u>.</u> 6.5		JM13-12-3
				<b>Location</b>		Loc Oty	Lo	oc Code					

MAT022 118.3487 124643 118.3487

124643

											ĺ	DQA:	Da	ite:	
NCR: Y	'es	/ No				WORK ORDER NON-C	CON	<b>IFORN</b>	MANCE / UP	DATE					•
			· · · · · · · · · · · · · · · · · · ·								QA Cl	osed:	Da	ite:	
Work Orde	er:					DISPOSITION				AGAINST DE	PARTN	IENT,	/PROCESS		
Part No.				Rework Skid-tube Crosstube  Scrap Machining Small Fab  Use-as-is Thermoforming Finishing			Water Jet Prod. Eng. Coor. Rec/Store/Packaging				Engineering Quality Other				
NCR No.			Work Order Update	]		Large Fab	Composite	]	•	Supplier					
Root					Descri	ption of work order update	li	nitial	Act	tion	Sign	&			
Cause	٠	Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Desci	ription	Da	te	Verificatio	n	QC Inspector
Doc/Data															
Equip/Tooling					1										
Operator							ł								
Material														]	
Setup					ļ										
Other														-	
Process															
Supplier															
Training		,					İ								
Unapproved			<u> </u>												
						F	AUL	T CATE	GORY						
Landi	ng C	Sear				General	_	Ī			_				ı
		Bending				Bend	Ш	Grain		ļ	Ovalize	ed		Ш	Pressure/Forced
		Centre Not Concentric to O/S		o/s	BOM/Route	Ш	Hardwa	re		Over/l	Jnder	tolerance		Temperature/Cure	
		Cracks				Broken/Damaged	Ш	Inspecti	on Incomplete		Part In	corre	ct	Ш	Weld
		Crushed/Crimped		Burrs	Ш	Instructions Incomplete/Unclear		Part Lo	st/M	issing		Wrong Stock Pulled			
'	i	Cuffs			Contamination		Maintenance			Part M	loved				

Mislabeled

Out of Calibration

Out of Sequence

Outside Dimensions

Misread

Offset

Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

DART AEROSPACE LTD	Work Order:	108713
Description: Doubler	Part Number:	D3220-3
Inspection Dwg: D3220 Rev: B		Page 1 of 1

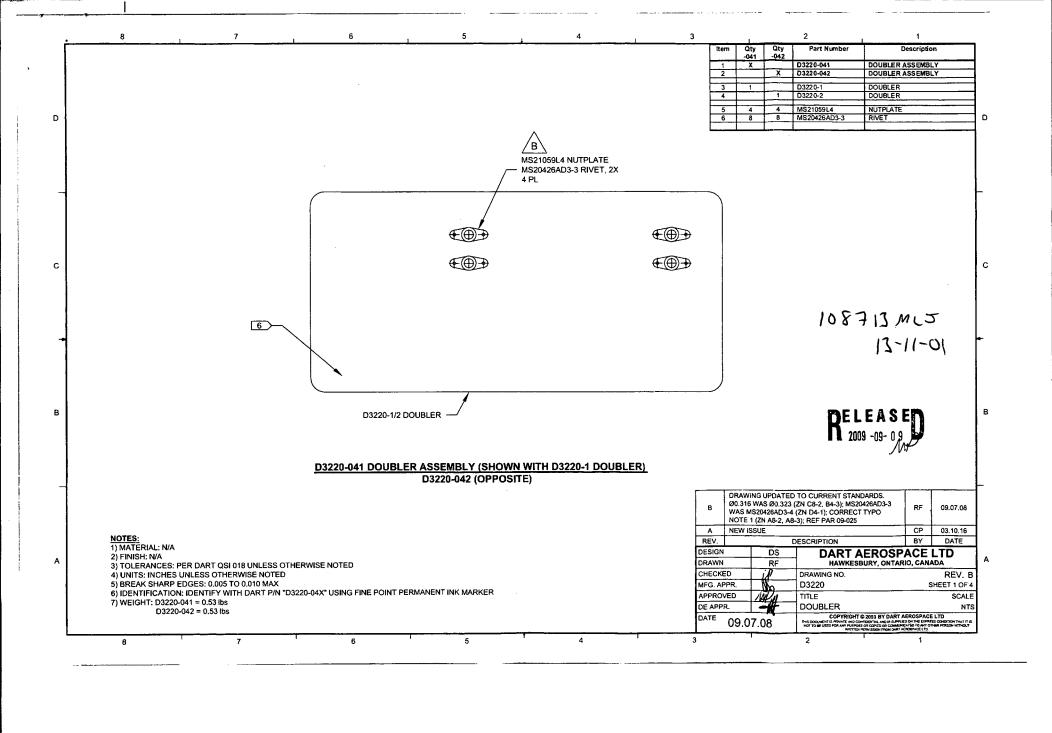
## FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

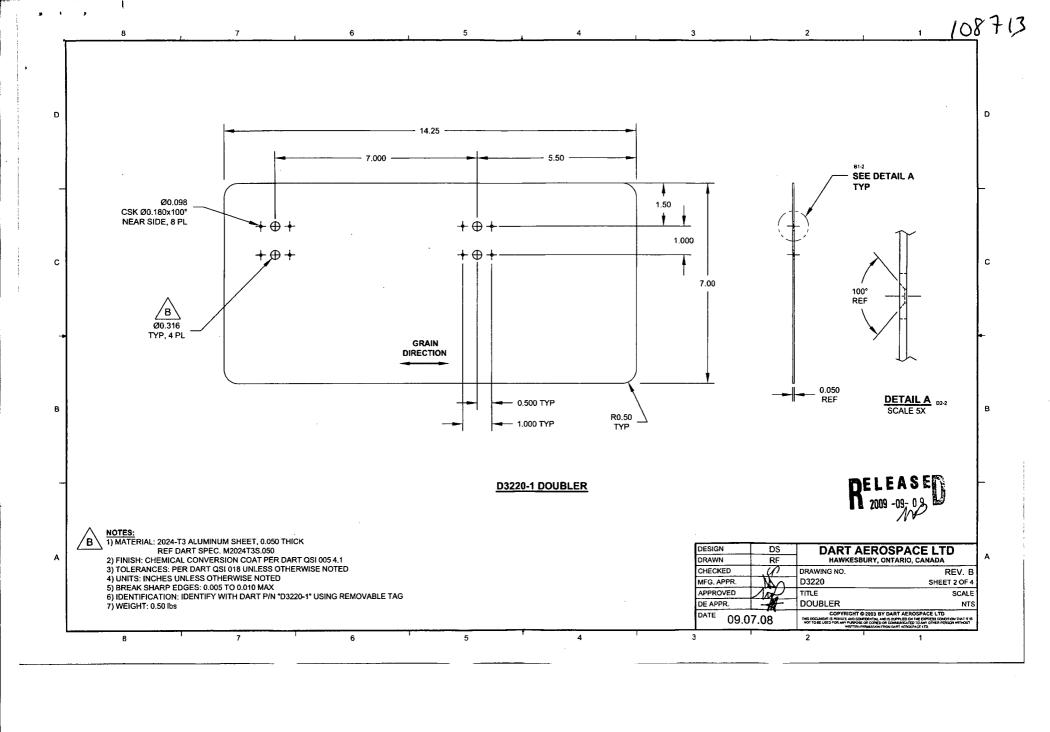
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
6.94	+/-0.030	6.945"	_		V	
12.32	+/-0.030	12.32"	-		丁	
R0.20	+/-0.030	0.20	_		\$ R6	
0.050 thick	+/-0.005	0.849	_		V	
Grain Direction	N/A	_	<i>-</i>			
		·				
			,			
			DAS			

Measured by: JM	Audited by:	9-89	Prototype Approval:	N/A
Date: 13-12-3	Date:	B 12 3	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.02.27	New Issue P/O D412-698-013	KJ/RF , A	- 1.1
В	10.02.02	Dwg Rev updated	KJ 🙌	
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